The Army's Advanced Collaborative Environment (ACE)

Lee James III

A totally collaborative environment will help improve sensor-to-shooter response time and identification of high-payoff targets at all depths of the tactical battlefield.

The Army is making fundamental shifts in its organizational structure, its business processes and its management and use of information, information systems and information technologies. As the acquisition business is practiced in the Army today, many program managers (PMs) and program executive officers (PEOs) invest in the development, implementation and sustainment of disparate knowledge systems to support their individual programs or small groups of programs. These investments represent a substantial expense for the Army, investments that can potentially dilute mission funds programmed for warfighting systems. Because these systems are typically implemented independently by individual PMs and PEOs, the resulting capabilities are duplicative, lack sufficient interoperability and can inadvertently prevent timely, accurate and complete information from reaching decision makers.

To effectively achieve all Army transformation objectives, the Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASAALT) has initiated an effort to develop the Army's ACE. ACE consists of a coordinated suite of systems that work together to meet the Army's data management needs across the life cycle. ACE will provide the business intelligence required for timely and strategic decisions, while adding the value of interoperability across programs, domains, other services and industry. On Aug. 26, 2003, the ASAALT/Army Acquisition Executive Claude M. Bolton Jr. and GEN Paul J. Kern, Commanding General, Army Materiel Command (AMC), jointly signed and released a policy memorandum that created the ACE initiative and directed PEO Enterprise Information Systems (EIS) to form and lead a Governance Board to manage ACE development and fielding.

The ACE concept grew out of the previous Integrated Digital Environment mandate to promote the sharing of information and life-cycle management of program and product life-cycle data. ACE is envisioned as an integrated suite of commercial-off-the-shelf products that will provide the domain with a standard set of data management capabilities in a network-centric, services-oriented environment. ACE's objectives will reduce domain investments in information management and information technology (IT), while also improving data interoperability, thereby ensuring that decision makers have timely and accurate data

on which to make program decisions. Ultimately, ACE will enable the acquisition domain to efficiently and appropriately share its data and data management services with other domains, services and industry partners. ACE will also significantly improve the acquisition domain's ability to manage its programs across the acquisition life cycle and enable more effective and comprehensive integration of modeling and simulation tools and capabilities with all aspects of the life cycle. The goal: ensure the effective integration of acquisition data with the logistics and sustainment domain, the requirements development domain and the warfighter. The policy memorandum orders all new or existing programs under ASAALT and AMC Research, Development and Engineering Command (RDECOM) oversight to plan for integration to the Army ACE as its capabilities and services become available.

As a prototype effort aligned with the Army's transformation objectives, the Future Combat Systems (FCS) program has already established an ACE for the system-of-systems that fall under the FCS umbrella. Although ACE will leverage proven and appropriate FCS ACE elements, it is independently pursuing:

• Architecture options.
• Functional and life-cycle requirements across the entire domain.
• External and cross-domain interoperability requirements.
• Information technologies that can best provide for ACE requirements.

> ACE is envisioned as an integrated suite of COTS products that will provide the domain with a standard set of data management capabilities in a network-centric, services-oriented environment.

We must ensure that the industry information systems that interface and exchange information management services with ACE work efficiently and effectively because of the major role they play in the development, fielding and life-cycle support of our weapon systems.

PEO EIS has the lead in the Army ACE effort and is the focal point in coordinating with the PEO community, RDECOM, AMC G-3 and other organizations to ensure that all stakeholder requirements are adequately reflected in the development of ACE requirements and the FY06 Program Objective Memorandum (POM) submission. Kevin Carroll, PEO EIS, is leading the Army ACE Governance Board and its supporting working groups' activities. His focus is to ensure that the evolving services-oriented ACE architecture model is traceable to Army ACE requirements and is compliant with both the DOD Net-Centric Enterprise Services model and the Joint Technical Architecture. The Governance Board and its subordinate working groups will produce a coordinated functional requirements document and a business case analysis in time to compete for funding in the FY 06-11 POM.

PEO EIS has enlisted the help of the PEO/PM community to kick-off the requirements development process by requesting the participation of 15 to 20 individuals from each PEO community. These individuals must have recent and substantial experience/expertise in a variety of functional areas, from a wide range of programs representing different acquisition category levels and different acquisition phases. The PEO EIS team will

The FCS Program has already established an ACE for the system-of-systems that fall under its purview. Once the domain is fully established and integrated Armywide, warfighters will benefit from the data management capabilities and network-centric, services-oriented environment. Ultimately, ACE will enhance battlefield situational awareness by providing commanders seamless connectivity between satellites, sensors, communications' equipment, vehicles, weapons platforms and aircraft. U.S. Army photo by CPT Tim Beninato, 28th Public Affairs Detachment Commander.

personally interview those individuals using a structured, process-focused questionnaire augmented by an unstructured dialogue that will focus on producing a comprehensive picture of the PEO and PM priority and supporting requirements. This effort is being augmented by a parallel exploration of RDE community requirements, and will then be expanded into ASAALT and other domain information requirements. Once completed, PEO EIS will then take the collected information and develop an Initial Capabilities Document (ICD). Those requirements will then be used to support a business case analysis and support the competition for funds in the FY 06-11 POM process.

The FY 06-11 POM support documentation will include an initial Acquisition Strategy, a Life Cycle Cost Estimate (LCCE) and a Business Case Analysis (BCA). The ACE POM documentation will be submitted under the Equipping Program Evaluation Group. The LCCE will be based on the requirements in the ICD and include hardware, software and operations and sustainment costs. The BCA will estimate ACE cost, its benefits to the Army and the project's economic viability. The BCA will provide PEO EIS and Army leaders with visibility into ACE's capabilities, costs and value, and provide insight into the actions that may be necessary to realize the expected benefits.

Assuming a successful competition in the POM submission, the ACE effort will evolve into a formal acquisition program that will be managed under PM Acquisition, Logistics and Technology Enterprise Systems and Services (ALTESS). PM ALTESS will assess the resources and personnel required to complete this mission. Then, ALTESS will determine and recommend an implementation schedule to the Governance Board. ASAALT will sponsor the ACE's central funding and work to support PEO EIS in delivering an incremental suite of evolving capabilities that provide priority solutions to the domain at large. By implementing a centrally funded, comprehensive suite of priority capabilities that meet the domain's life cycle needs, and its participation in the larger Army and defense community, ASAALT will be furthering the objectives of Army transformation and providing more effective and capable services to the warfighter at substantially less cost.

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The DCMA Program Status Visibility Initiative

LTC Bob Ordonio

BEST BUSINESS

PRACTICES

Fast-paced development is happening throughout the Army acquisition community to provide warfighters the best products and services available. Hence, many new acquisition initiatives are being identified and implemented to support the program manager office (PMO) in achieving program success. One such acquisition program currently being implemented is the Program Status Visibility (PSV) initiative. This initiative is a joint endeavor between the Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASAALT) and the Defense Contract Management Agency (DCMA). The initiative will facilitate a collaborative environment between the PMO and DCMA on program assessments. The PSV initiative will provide PMOs, program executive offices (PEOs) and HQDA timely information on major defense programs and will assist in developing an integrated and collaborative approach between ASAALT and DCMA in assessing acquisition programs.